We claim:

1. A method of producing an oxidation-protected electrode for a capacitive electrode structure, which comprises the following steps:

forming a metal oxide layer on a substrate;

applying an oxidation inhibiting layer, configured to be impervious to oxygen atoms, on the metal oxide layer; and

forming an electrode on the oxidation inhibiting layer.

2. The method according to claim 1, wherein the step of forming the metal oxide layer comprises thermally oxidizing a deposited metal layer.

3. The method according to claim 1, which comprises forming a metal barrier layer between the metal oxide layer and the substrate.

4. The method according to claim 1, wherein the applying step comprises forming the oxidation inhibiting layer by chemical vapor phase deposition.

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5. A capacitive electrode structure, comprising:

a semiconductor substrate;

a metal oxide layer formed on said semiconductor substrate;

an oxidation inhibiting layer on said metal oxide layer; and

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an electrode on said oxidation inhibiting layer.

6. The capacitive electrode structure according to claim 5, wherein said oxidation inhibiting layer is electrically conductive.

7. The capacitive electrode structure according to claim 6, wherein said electrode is formed by a metal layer on said electrically conductive oxidation inhibiting layer.

8. The capacitive electrode structure according to claim 6, wherein said electrically conductive oxidation inhibiting layer is composed of tungsten nitride.

9. The capacitive electrode structure according to claim 6, wherein said electrically conductive oxidation inhibiting layer is composed of titanium nitride.

10. The capacitive electrode structure according to claim 5, wherein said oxidation inhibiting layer is not electrically conductive and said electrode is formed by a polysilicon layer on said oxidation inhibiting layer.

11. The capacitive electrode structure according to claim 10, wherein said electrically non-conductive oxidation inhibiting layer is composed of a material having a high dielectric constant.

12. The capacitive electrode structure according to claim 10, wherein said electrically non-conductive oxidation inhibiting layer is composed of silicon nitride.

13. The capacitive electrode structure according to claim 5, wherein said metal oxide layer is composed of an oxygen-rich material having a high dielectric constant.

14. The capacitive electrode structure according to claim 13, wherein said metal oxide layer is composed of titanium dioxide.

15. The capacitive electrode structure according to claim 13, wherein said metal oxide layer is composed of tantalum pentoxide.

16. The capacitive electrode structure according to claim 13, wherein said metal oxide layer is composed of aluminum oxide.

17. The capacitive electrode structure according to claim 5, which comprises a metal barrier layer between said metal oxide layer and said substrate.

18. The capacitive electrode structure according to claim 17, wherein said metal barrier layer is composed of silicon dioxide.

19. The capacitive electrode structure according to claim 17, wherein said metal barrier layer is composed of silicon nitride.

20. The capacitive electrode structure according to claim 5, wherein said oxidation inhibiting layer comprises a nitrogen-rich compound for preventing a diffusion of oxygen atoms through said oxidation inhibiting layer.